1. A composite membrane for a biosensor, comprising:

an inner membrane layer;

an outer membrane layer; and,

an enzyme layer, said enzyme layer comprising a matrix comprising at least one enzyme, a cross-linking agent, and an enzyme stabilizer.

2. The composite membrane of claim 1, wherein said enzyme is lactate oxidase.

3. The composite membrane of claim 1, wherein said enzyme is creatinase.

4. The composite membrane of claim 1, wherein said enzyme is sarcosine oxidase.

5. The composite membrane of claim 1, wherein said enzyme is creatininase.

6. The composite membrane of claim 1, wherein said enzyme comprises a mixture of creatinase and sarcosine oxidase.

7. The composite membrane of claim 1, wherein said enzyme comprises a mixture of creatinase, creatininase and sarcosine oxidase.

8. A matrix for an enzyme sensor, comprising:

lactate oxidase;

a cross-linking agent; and

a enzyme stabilizer.

9. The matrix of claim 8, wherein said matrix forms a cross-linked matrix of proteins having enzymatic activity.

10. The matrix of claim 8, wherein said matrix forms an electrochemical electrode.

11. The matrix of claim 8, further comprising bovine serum albumin.

12. The matrix of claim 8, wherein said cross-linking agent comprises a dialdehyde.

13. The matrix of claim 12, wherein said cross-linking agent comprises glutaraldehyde.

14. The matrix of claim 13, wherein said cross-linking agent comprises 1-10% glutaraldehyde by weight.

15. The matrix of claim 13, wherein said cross-linking agent is 5% glutaraldehyde by weight.

16. The matrix of claim 8, wherein said cross-linking agent comprises a diisocyanato.

17. The matrix of claim 16, wherein said cross-linking agent comprises 1,4-diisocyanatobutane.

18. The matrix of claim 8, wherein said cross-linking agent comprises a diepoxide.

19. The matrix of claim 18, wherein said cross-linking agent is selected from the group consisting of 1,2,7,8-diepoxyoctane and 1,2,9,10-diepoxydecane.

20. The matrix of claim 8, wherein said enzyme stabilizer is selected from the group consisting of polyethyleneimine, polypropyleneimine, poly(N-vinylimidazole), polyallylamine, polyvinylpiridine, polyvinylpyrollidone, polylysine, protamine and their derivatives.

21. The matrix of claim 20, wherein said enzyme stabilizer comprises 1-20% polyethyleneimine by weight.

22. The matrix of claim 21, wherein said enzyme stabilizer comprises 5% polyethyleneimine by weight.

23. A matrix for an enzyme sensor, comprising:

creatinase;

sarcosine oxidase;

a cross-linking agent; and,

an enzyme stabilizer.

24. The matrix of claim 23, further comprising creatininase.

25. The matrix of claim 23, wherein said matrix forms a cross-linked matrix of proteins having enzymatic activity.

26. The matrix of claim 23, wherein said enzyme sensor comprises an electrochemical electrode.

27. The matrix of claim 23, wherein said cross-linking agent comprises a dialdehyde.

28. The matrix of claim 27, wherein said cross-linking agent comprises glutaraldehyde.

29. The matrix of claim 28, wherein said cross-linking agent comprises 1-10% glutaraldehyde by weight.

30. The matrix of claim 28, wherein said cross-linking agent is 5% glutaraldehyde by weight.

31. The matrix of claim 23, wherein said cross-linking agent comprises a diisocyanato.

32. The matrix of claim 31, wherein said cross-linking agent comprises 1,4-diisocyanatobutane.

33. The matrix of claim 23, wherein said cross-linking agent comprises a diepoxide.

34. The matrix of claim 33, wherein said cross-linking agent is selected from the group consisting of 1,2,7,8-diepoxyoctane and 1,2,9,10-diepoxydecane.

35. The matrix of claim 23, wherein said enzyme stabilizer is selected from the group consisting of polyethyleneimine, polypropyleneimine, poly(N-vinylimidazole), polyallylamine, polyvinylpiridine, polyvinylpyrollidone, polylysine, protamine and their derivatives.

36. The matrix of claim 35, wherein said enzyme stabilizer comprises 1-20% poly(N-vinylimidazole) by weight.

37. The matrix of claim 36, wherein said enzyme stabilizer comprises 5% poly(N-vinylimidazole) by weight.

38. A matrix for an enzyme sensor comprising:

at least one enzyme selected from the group consisting of lactate oxidase, creatinase, sarcosine oxidase and creatininase;

a cross-linking agent; and,

an enzyme stabilizer.